We share the load.

Offshore & subsea solutions for lifting
and moving loads.



wesharetheload.com

We’re out there to help you.





"When gusts of wind reaching force 8 sweep across the deck, making every movement a challenge, the only thing that matters is that everyone can rely on the equipment."

We share the load.

Wind, weather, swell: mistakes are not an option in the offshore and subsea sector. Every move must be precise, every connection must be secure, and each team member must be able to rely on their colleagues. At RUD, we make sure that no one has to bear the load alone.

We know the conditions under which your team performs at its best. We know all about your applications and challenges. For over 150 years, we have been making it easier, safer and more efficient for users all over the world to handle heavy loads.

That's why we don't just see ourselves as a supplier of innovative, smart lifting and lashing solutions, but as part of the team. Part of what holds everything together. A partner who stands with you when the seas get rough.

We share the load.

We’re in our element where maximum performance is the bare minimum.



If your team needs to lift heavy loads safely at sea or lower bespoke structures to great depths, and if expensive equipment and tight deadlines mean there is no room for compromise, you need a partner who understands what is at stake. One who is part of your team. A partner like RUD.



Safe, durable, efficient.

As a European think tank, we regularly set technological standards for lifting and moving loads. Many of the current industry standards were developed by RUD engineers. Passionate specialists who are never content with the status quo. Their aim: maximum advantages for the user. Across the entire maritime sector, in shipbuilding and port logistics, and in the offshore industry and subsea sector.

International certifications and quick availability.

We develop and manufacture all of our products and solutions from European steel in state-of-the-art production sites in Germany. They have been tested to ensure they can withstand the extreme loads and remain reliable for decades, so they easily cope with temperatures as low as –40 °C, seawater, salty air, and pressure at great depths. Many hold the important DNV certificate and comply with NORSOK R-002. Every bolt and load-bearing component undergoes 100 per cent crack testing.

Almost all the products in our wide range are available locally. Not just our products, but also our services, are available to you across the globe. Our local contacts are part of the team and will provide you with the technical support you need.

Let's talk about the challenges you face. And how we can master them together.

Certifications and conformity with relevant standards:

DNV-ST-0377 and DNV-ST-0378
NORSOK R-002
DIN EN 818 (chains)
CE certification
ASME B30.26
ISO 9001
ISO 14001
EN 1677/1

We develop and manufacture with maximum depth of production in Germany.



Unlike others that are outsourcing, we focus on depth and manufacture our high-value lifting and lashing equipment at our site in Aalen, Germany. This ensures access to highly qualified professionals whose training standards are recognised worldwide. The result: products at the highest level. Our VWBG is a perfect example of what this really means.



1. Forged blanks sourced entirely from Germany.

The steel used for the forged blanks is produced in Germany – just like the forged parts themselves, which we manufacture in our own forge in Germany.



2. Mechanical processing.

The forged blanks undergo further processing by machine (turning and milling) at our facility in Aalen. We thereby continuously check compliance with the dimensions.



3. Bending and welding.

In this step, we use induction heating to heat the round steel section, which is then bent mechanically. The ends are then joined using either resistance welding or burn-through butt welding.



4. Heat treatment.

After forming and welding, the components undergo a specific heat treatment. We optimise mechanical properties such as strength, toughness and fatigue resistance through controlled hardening and tempering.



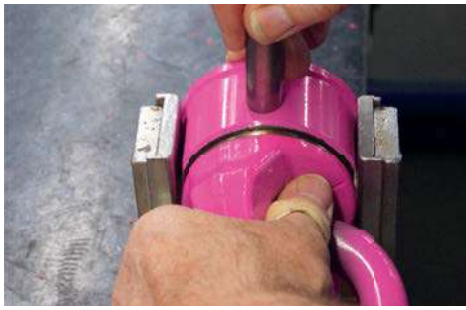
5. Surface coating.

To ensure optimum protection, the surfaces are finished with a powder coating or zinc flake coating. We carry out the former here in Aalen, while a trusted German partner of ours handles the latter.



6. Assembly.

During assembly, we join the individual components together and install the RFID tag, which is used for product identification. To finish, we then check the finished product for functionality.



7. Quality testing.

Each product is checked as part of extensive testing procedures. This includes visual inspections, dimensional checks and non-destructive and mechanical testing. This is how we ensure that all components adhere to RUD's rigorous quality and safety standards.





RUD solutions for onshore, offshore and subsea applications.

Every environment presents its own challenges, from the shipyard to the deep sea. In ports and shipyards, heavy loads, tight deadlines and limited space are a daily reality. These factors are compounded offshore by wind, weather, swell, saline environments and dynamic loads. In the subsea sector, currents, high pressure and limited visibility make every lifting operation more difficult, whilst corrosive conditions place additional demands on the equipment. Mistakes are not an option.

RUD develops solutions for precisely these requirements. They make handling easier and ensure maximum safety, impressing with their outstanding reliability. From onshore and nearshore applications to offshore operations in the deep sea. This enables users to move their loads safely, efficiently and in a controlled manner, even under extreme conditions.



"Down there, you don't usually get a second chance. Reliable equipment is absolutely essential."

We share the load.


OX+ RUD
34t CE



Lifting **cable reels.**

For our cable reel lifting solution, the load is supported by VLBS-U lifting points designed to withstand the loads they are subjected to. At the same time, the OX+RUD lifting beam ensures optimum load distribution, thus ensuring a safe lifting operation. The key advantage is that all of our products are designed to withstand harsh environments and demanding operating conditions in the maritime sector.

- RUD VLBS-U lifting points (1.5 t – 16 t WLL)
- OX+RUD multi-lug lifting beam
- RUD VIP 2-leg chain suspension



Onshore & nearshore solutions.

Lifting **worm gears.**

When manufacturing worm gears for wind turbines, drilling rigs and specialised vessels, RUD solutions ensure completely safe lifting. RUD VRS-STARPOINT lifting points and RUD VIP 2-leg chain suspensions connect the gears to the crane hook. To ensure optimum load balancing, RUD shortening claws make it possible to adjust the chain sling to the load and ceiling height, and to align the load perfectly.

- RUD VRS-STARPOINT lifting points (0.1 t – 20 t WLL)
- RUD VIP 2-leg chain suspension







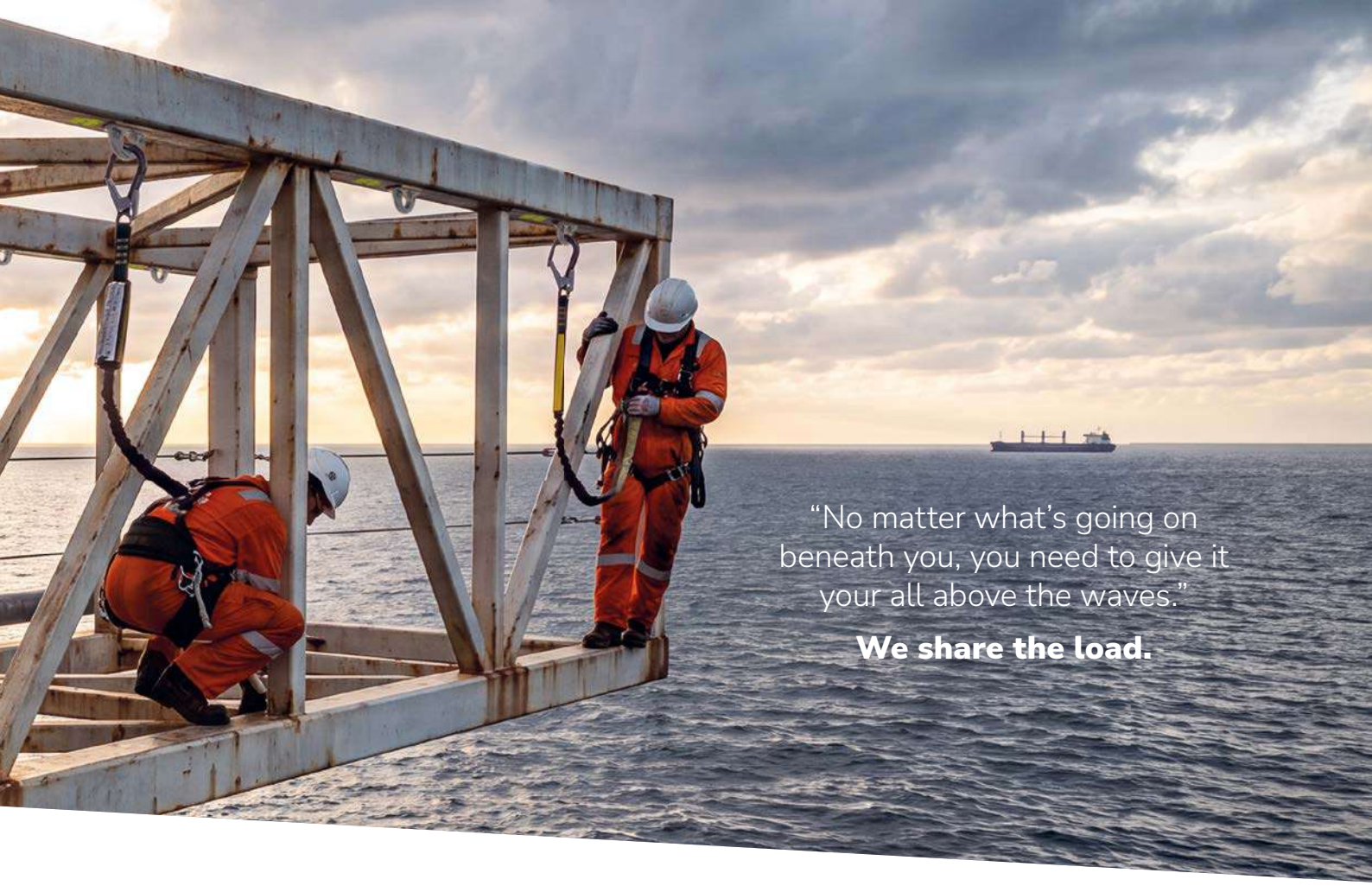


Offshore solutions.

Personal protection at sea.

Rough seas, wind and time pressure are all factors that pose a threat to personal safety when working on wind turbines or ships. Our weldable PSA INOX-ABA lifting point, made from stainless steel, has been specifically certified for use with personal protective equipment (PPE) in the shipbuilding industry. It also comes in other sizes and is suitable for a wide range of applications involving the lifting and securing of loads on board a ship. This is how we support safe working practices in the maritime sector.

- PSA INOX-ABA lifting points (1.6 t WLL)





Anschlageinrichtungen Persönliche Schutzausrüstung (PSA)		Fall Protection Anchorage Point Stop device
Typ	PSA-INOX-ABA 2 Pers.	Type
Prüfgrundlagen	TS 16415/12 EN 795/12	Fundamental test principles
Hersteller	RUD	Manufacturer

The safety label indicates the tested fall protection anchorage point and provides information about load capacity, use and traceability.



Lifting **generators.**

RUD products ensure that lifting even heavy generators runs smoothly. Our solution: VLBG 10.9 lifting points on the generator, modular spreader beams from OX+RUD, and VIP 1- and 4-leg chain suspensions. This ensures optimum control and a high level of operational reliability during complex lifting operations.

- RUD VLBG 10.9 lifting points (0.3 t – 20 t WLL)
- OX+RUD modular spreader beams (9.0 t – 1,350 t WLL)
- RUD VIP 1-leg chain suspension
- RUD VIP 4-leg chain suspension






FOX+HROD


“This is where safety and teamwork matter,
and that every move you make is spot on.”
We share the load.



Lifting **subsea steel structures.**

When lifting heavy subsea steel structures, control and absolute reliability are essential. The RUD W-ABA lifting points take the load and ensure safe movement, even under dynamic loads. When used in combination with the reliable RUD ROV-HOOK, RUD VIP 2-leg chain suspensions are the ideal solution for lowering equipment underwater. Thanks to its patented twin-trigger mechanism and well-designed construction, operating via an ROV is considerably easier than with conventional hooks. Handling the load underwater is also significantly safer and more time-efficient.

- RUD W-ABA lifting points (0.8 t – 31.5 t WLL each)
- RUD ROV-HOOK (10 t / 25 t WLL)
- RUD VIP 2-leg chain suspension





Lifting
subsea conveyor trees.

The Subsea Christmas Tree – the central component for the control and safety of an underwater conveyor system. Precision and safety matter when it comes to lifting heavy structures. The RUD ACP-TURNADO OCEANSTAR lifting points, certified by DNV for both offshore and subsea applications, are designed to absorb these forces. Four RUD ROV-HOOK units enable it to be securely attached or detached underwater, either by remotely operated vehicles (ROV) or manually. This is how subsea teams maintain control over one of the most delicate lifting operations in the subsea sector.

- RUD ACP-TURNADO OCEANSTAR lifting points (0.5 t – 8 t WLL)
- RUD ROV-HOOK (10 t / 25 t WLL)
- RUD VIP 4-leg chain suspension



RUD products
for maritime applications.

NEW!



ACP-TURNADO OCEANSTAR.

The first DNV-certified lifting point for subsea applications.

- Certified according to DNV-ST-0377 and DNV-ST-0378; fulfils ASME B30.26 and NORSOK R-002.
- No unexpected snagging of the load and no shock loads thanks to the innovative spring mechanism.
- All components have a zinc flake coating for maximum corrosion resistance – with a salt spray test resistance of 720 hours.
- All components have a reduced maximum hardness (≤ 38 HRC), making them highly resistant to hydrogen embrittlement.
- Nominal sizes: M8 – M30.
- WLL: 0.5 t – 8 t.

W-ABA.

The indestructible weld-on point that can withstand loads from all directions.

- Certified according to DNV-ST-0377 and DNV-ST-0378.
- Extremely robust.
- For loads in all directions – for varying lifting situations.
- Forged from one piece: no rattling noise or shaking, even when subjected to strong vibrations or shock loads.
- Prevents underlying corrosion thanks to the continuous, closed fillet weld.
- Approved for welding onto general-purpose structural steels (black-on-white joints).
- WLL: 0.8 t – 31.5 t.





ROV-HOOK.

The safest and most efficient underwater hook in the industry.

- Convenient handling by ROV or manually.
- Opening possible with just one gripper.
- Use of all common grippers is possible.
- Thanks to the patented safety mechanism, there is no risk of the load being released accidentally: the safety latch opens outwards and can only be opened by operating both release levers. The gripper automatically closes and locks when the levers are released.
- No accidental opening (shedding) or hooking (snagging) – risks associated with many conventional ROV hook systems that use monkey fists.
- High corrosion protection with zinc flake coating on the twin-trigger mechanism and hook flap.
- WLL: 10 t, 25 t.

INOX-ABA.

The rust-proof weld-on point – loadable in all directions.

The INOX-ABA offers all the advantages of the W-ABA and also the following features:

- Excellent corrosion resistance – made from Duplex steel 1.4462.
- PPE certification for personal protection in the 1.6-t variant.
- WLL: 0.8 t – 2.7 t.



VLBG 10.9.

The load ring with adjustment in the direction of force.

- Certified according to DNV-ST-0377 and DNV-ST-0378; fulfils NORSOK R-002.
- High corrosion resistance and durability in extreme conditions thanks to RUD bolts with zinc flake coating (class of strength 10.9).
- Captive yet exchangeable RUD combi-head bolt.
- The clamping spring reduces noise and holds the lift bail in the required position, making it easy to attach the lifting equipment and ensuring a low-profile design when folded down.
- No unexpected snagging of the load thanks to the eccentric shape.
- Easy replacement of the bolt for cost-saving maintenance.
- Nominal sizes: M8 – M24.
- WLL: 0.3 t – 4 t.





VLBG-PLUS.

The load ring with the EXTRA WLL.

The VLBG-PLUS offers all the advantages of the VLBG 10.9 but differs in the following features:

- Certified according to DNV-ST-0377 and DNV-ST-0378 from size M30.
- 10.9-bolt from M30.
- Nominal sizes: M8 – M48.
- WLL: 0.63 t – 20 t.

INOX-STAR.

The rustproof ring bolt, for loading on all sides.

- Excellent corrosion resistance – made from Duplex steel 1.4462.
- Can be loaded from all sides – high flexibility and safety for a variety of lifting operations.
- 360° rotatable: automatically aligns with the direction of force – no dangerous twisting.
- Nominal sizes: M8 – M24.
- WLL: 0.5 t – 2.5 t.





VRS-STARPOINT.

The flexible lifting point with an integrated star-shaped spanner.

- Fulfils NORSOK R-002.
- Rotatable through 360°, automatically aligning the ring body in the direction of the force and preventing dangerous twisting. This ensures maximum operational and application safety.
- Simple, flexible assembly and dismantling with the star-shaped spanner.
- Galvanised and powder-coated body for high corrosion resistance.
- Nominal sizes: M8 – M64.
- WLL: 0.1 t – 20 t.

VLBS-U.

The pivoting lifting point for extreme angles.

- Certified according to DNV-ST-0377 and DNV-ST-0378.
- Safe load handling even at extreme angles: 180° swivelling lift bail, with loading up to 90° in the plane of the ring.
- The clamping spring achieves easier weld-on, noise reduction, and keeps the lift bail in the desired position.
- WLL: 1.5 t – 16 t.





CCS-FASTLOX.

The click-on, rapid clevis shackle.

- Up to 80 % faster to assemble and dismantle than standard clevis shackles.
- Simplest tool-free handling – without bolts, nuts and splint.
- Outstanding safety thanks to automatic securing of the bolt.
- Nominal sizes: 4 – 22 mm.
- WLL: 0.63 t – 20 t.

VIP-lifting means (grade 10).

The chains with high WLL.

- Certified according to DNV-ST-0377 and DNV-ST-0378 (nominal sizes 6 – 22 mm); fulfils NORSOK R-002.
- Up to 30 % higher WLL than Grade 8 with the same chain diameter.
- Longer service life thanks to special heat treatment and high-quality material.
- A wide range of components for maximum flexibility and a variety of applications.
- Nominal sizes: 4 – 28 mm.
- WLL: 0.63 t – 126 t.



Our **DNV-certified** lifting points and lifting means at a glance.



ACP-TURNADO OCEANSTAR.



VLBG / VLBG-Z.



VLBG-PLUS.



W-ABA.



INOX-ABA.



VRBS.



VRBS-FIX.



VRBK-FIX.



VLBS / VLBS-U.



RBG.



VRBG.



VRBG-FIX.



VIP-Lifting Chain.



VCGH.



VAK / VBK.



VA.



VB.



VMVK.



VV.



Hoist chains.

Performance under offshore conditions.

Advantages and special features of our hoist chains:

- Corrud-DT zinc flake coating for excellent corrosion protection.
- High resistance to moisture, salt water and harsh environments.
- Operating temperatures down to –40 °C for reliable operation worldwide.
- Suitable for electric, pneumatic and manual hoists.
- A wide range of surface coatings and chain diameters is available.

Find out more about the RUD hoist chains here, or get in touch with us directly.

neXera 800.

The high-speed hoist for wind turbines.

- Lifting speeds of up to 75 m/min significantly reduce service times.
- Shorter standstill times increase system availability.
- Modular system for various turbine concepts.
- Thanks to its unique safety features, this product offers maximum safety for service engineers during maintenance work.
- The new RUD X-Drive drive system reduces chain wear, resulting in lower operating costs.

Find out more about the neXera here, or get in touch with us directly.





TECDOS OMEGA.

The TECDOS OMEGA is ideal for operating a ship's crane, adjusting solar panels or moving machinery, and proves its worth wherever rack-and-pinion, spindle or roller chain drives reach their limits.

- Dirt, rain, corrosive substances and even ice cannot stop the TECDOS OMEGA DRIVE.
- Various maritime classification certificates can be issued.
- Moving or fixed drive.
- Chain speed 1 – 6 m/min at full load, 12 m/min maximum.
- Special coating possible.

Find out more about the TECDOS OMEGA here, or get in touch with us directly.

TECDOS PI-GAMMA.

The TECDOS PI-GAMMA complete system is ideal for both horizontal and vertical applications, offering fixed 180-degree deflection (PI) or flexible 90- to 180-degree deflection (GAMMA).

- Flexible integration in more complex system layouts.
- Consistent force transfer reduces the wear occurrence of chains and components.
- Ideal for offshore, port and industrial systems with tight spaces.
- Tried-and-tested RUD quality for maximum process reliability.

Find out more about the TECDOS PI-GAMMA here, or get in touch with us directly.



OX+RUD Lifting Solutions for offshore applications.



OX+RUD BMC.

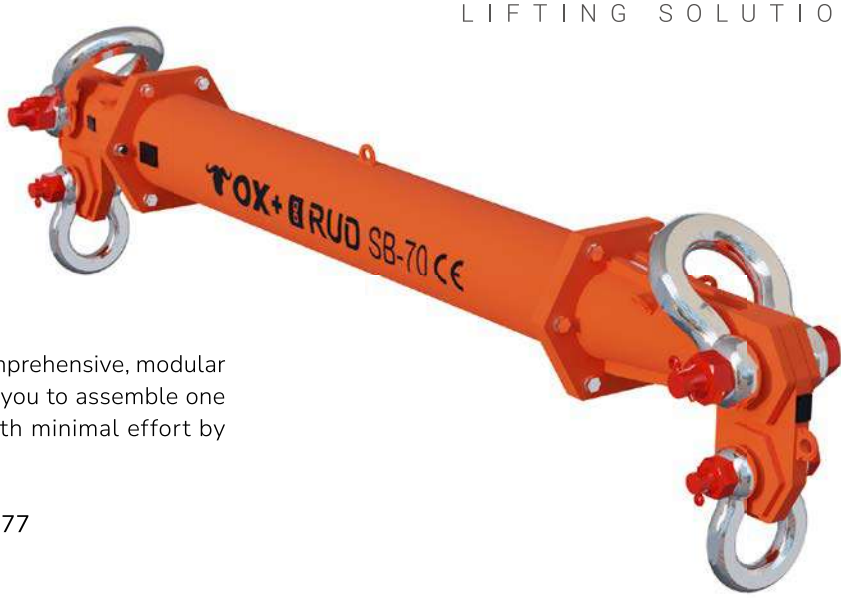
Multi-lug lifting beam for containers.

The BMC is the ideal solution for the safe and stable lifting of ISO-668-containers using specialised accessories. In addition, it can also be used with other components that feature ISO 1161 corner fittings.

- This is ideal for the horizontal lifting of ISO-668-containers weighing up to 34 tonnes, as well as other loads and platforms fitted with ISO-1161-corner fittings (by using twist-lock accessories such as the RUD VCH-K 16 or VCH-SL 22).
- A multi-hole pattern allows the transversely offset centres of gravity to be adjusted by repositioning the attachment point of the upper shackles or the 2-leg chain suspension.
- Longitudinal offset can be adjusted by shortening or lengthening the lower chain suspensions (either by trial and error or using predefined positions).
- Useful length: up to 2.5 m.
- WLL: 10 t – 34 t.

Find out more about the OX+RUD here, or get in touch with us directly.





OX+RUD SB.

Modular spreader beam.

OX+RUD spreader beams offer a comprehensive, modular range of configurations. This allows you to assemble one or more spreader beams on site with minimal effort by bolting them together.

- Certified according to DNV-ST-0377 and DNV-ST-0378.
- The smaller dimensions and lower weight make transport, storage and installation easier and reduce costs.
- Simple, fast assembly and adaptation to any lifting task.
- Cost-effective – replaces several spreader beams and girders.
- The lifting beams can be combined vertically for lifting operations using multiple lifting points.
- Available with shackles.
- Length from 1 to 36 m.
- WLL: 9 t – 1,350 t.

OX+RUD SBT.

Telescopic spreader beam.

- Perfect for lifting loads of different dimensions.
- Can substitute OX+RUD standard sections.
- Simple adjustment in length.
- Significant time is saved when adjusting the length compared to conventional spreader beams.
- Can be used in combination with standard spacers and end pieces.
- WLL: 9 t – 110 t.





OX+RUD corner elements.

For configuration of spreader frames.

- Accessories for joining various components together to form a frame.
- For more stability in frame joints.
- This is suitable for use with shackles, round slings and grommets.
- Modular and easy to assemble and dismantle, and can be adapted to various configurations and sizes.
- WLL: 9 t – 170 t.

RUD materials and coatings master extremes.

Developed for the extreme: the RUD ICE-BOLT.

The RUD ICE-BOLT represents maximum performance under extreme conditions. Our expertise in heat treatment, combined with our revolutionary, patented fine-grain steel, ensures an exceptionally durable and tough surface.

The result: excellent performance in the prism bending test, with notched impact values of at least 27 J at –60 °C.





The thread of the ICE-BOLT proves itself in the prism bending test. The test shows: the WLL is safely mastered by the ICE-BOLT, both statically and dynamically.

Powder-coating and zinc flake coating.

Superior corrosion protection for offshore and subsea applications: The inorganic zinc flake coating provides long-term, effective protection against corrosion for high-strength steel components and has proven its effectiveness even in the 720-hour salt spray test. We use it on selected RUD lifting points, where it exceed the requirements of EN ISO 10683 by 50 percent. Because the coating is so thin, the process can also be used on bolts and threads. Depending on the RUD product, a durable powder coating may alternatively be used, which provides reliable protection against moisture, salt water and mechanical stress.



Thanks to its zinc flake coating, the RUD ACP-TURNADO OCEANSTAR is effectively protected against corrosion even under extreme conditions.





Protection against hydrogen embrittlement.

The high loads involved pose a major challenge, particularly in the offshore and subsea sectors, due to the risk of hydrogen embrittlement and sudden, unpredictable fractures. In accordance with the relevant standards (DIN EN ISO 9934-1/-2/-3 or PAS 1061), we have subjected our lifting means and lifting points to rigorous testing. The result: even after 500 hours in aggressive saline acid, no signs of hydrogen embrittlement were detected in our Grade 10 products.

This means that we are now able to offer DNV-certified lifting points and lifting chains that are specifically designed for offshore use. To ensure the highest quality of the material, we manufacture them from high-toughness steels and avoid manufacturing processes that promote hydrogen formation. This method has been used in the offshore industry for many years without any known incidents.

Thanks to their material and special manufacturing process, even with RUD's Grade 10 chains, the risk of HISC (hydrogen-induced stress cracking) and hydrogen embrittlement is minimal. The advantage is that it offers maximum safety and reliability, even in the extreme conditions of offshore and subsea environments.

Why lifting points do not have grades.

Lifting points – unlike chains – cannot be categorised into grades. The reason: They consist of multiple components with different materials and qualities. It is therefore neither technically sound nor provided for in the standards to apply the concept of grades for chains to lifting points.

The interaction between materials, construction and component design is crucial to the performance of lifting points. Their Working Load Limit (WLL) is based on the actual tensile strength of the overall system.

In the past, WLL details for lifting points were often based on the known chain grades. Modern RUD lifting points exploit the technically achievable stability and tensile strength to the maximum without important safety and material qualities being impaired. This enables them to offer higher WLL while maintaining the same high levels of safety and durability.

The result, among other things, is the DNV-certified lifting points presented in this brochure. They offer users the highest possible performance and safety for demanding offshore and subsea operations.

	Grade 10 (VIP)	Grade 8
Working Load Limit	**6.7 t**	**5.3 t**
Nominal thickness	13 mm	13 mm
Components	VAK-RG-13 + VMVK-13 VIP chains 13 x 39 NL 3,000 mm VCGH 13	AK1-13 + BSEK Chains 13 x 39 GK8 NL 3,000 mm GSH 13
Working Load Limit	6.7 t = 125 %	5.3 t = 100 %
Temperature resistance 100 %	–40 °C to +200 °C (–40 °F to +392 °F)	–40 °C to +200 °C (–40 °F to +392 °F)

A comparison of RUD chain technologies across different quality grades.





Competence and services for you and your team.

Made just for you: our consultancy service.

For us, in-depth expert advice forms the basis of every solution. Our specialists in the offshore and subsea sector have many years of experience and technical expertise, as well as in-depth knowledge of the industry's specific characteristics. They analyse your requirements, then develop viable concepts tailored precisely to your individual challenges in consultation with you. You will benefit from safe and cost-effective solutions and processes to lift and move your loads, even under extreme conditions.

Successful development partnerships: Subsea7 and the RUD ROV-HOOK.

Many of RUD's major innovations have their origins in day-to-day practical applications. This is why we regularly form development partnerships, pooling our expertise, experience, and application know-how. The aim: to translate real challenges into new solutions.

One example of this is our development partnership with Subsea7. The subsea installation specialist approached us with a long-standing problem in the subsea industry: valuable capital assets are regularly damaged or lost entirely during underwater handling. The causes: accidental release (shedding) or hooking (snagging) of conventional ROV hooks under unfavourable conditions.

Over the course of two years, we collaborated with Subsea7 to develop several prototypes of an entirely new hook solution for ROVs. We then tested these prototypes under real operating conditions and gradually optimised the design. The result of this cooperation: the RUD ROV-HOOK. The innovative hook virtually eliminates both risk factors and enables safe, efficient handling by ROV. By doing this, the potential conflict between the industry's typical time pressures and high safety requirements is resolved. Furthermore, it delivers financial savings thanks to its reduced operating time.

These kinds of partnerships consistently produce bespoke RUD solutions that create competitive advantages and often set new industry standards.

Find out more about the RUD ROV-HOOK here, or get in touch with us directly.



RUD Digital World:
lift, move and secure loads the smarter way.

Use the RUD configurators to find the right chain suspension or lifting point quickly and easily.

Our configurators reliably help you to find the perfect lifting solution for your specific application, every time. With the RUD 3D lifting means configurator, you will find the perfect chain suspension for your specific lifting application. Thanks to its filter function, our digital lifting point configurator allows you to identify the exact lifting point required for your load.



Directly to the RUD configurators.

The RUD app for calculating load securing and lashing means.

Our smart app helps you choose the right lashing equipment and calculate load securing requirements with precision, whether you're transporting goods by lorry, rail or ship.



App Store

Google Play

RUD BUDDYtron: the lifting app.

Do you lift heavy, valuable loads and want to be on the safe side? Our lifting app, featuring NFC technology, offers a wealth of practical and product knowledge, as well as guidance and support for visual inspections. The lifting means and lifting point check ensures more reliability when choosing the right components.



App Store

Google Play

RFID features: as standard from RUD.

Many RUD products are equipped with an RFID transponder as standard. This means they can be identified as part of the mandatory equipment inspections in a matter of seconds. This saves time and makes your inspections much more efficient.



Our RFID transponders withstand even the toughest of ambient conditions such as high temperatures or aggressive substances.

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